it the policy to abandon? Say 'yes' or no'. If you say 'no', it is all right.

SHRI YOGINDER K. ALAGH: The more important issue is to check up the facts.

SHRI DIPANKAR MUKHERJEE: Is it the policy to abandon a project if there is a pre-commissioning problem? This is a very specific question, Mr. Minister.

SHRI YOGINDER K. ALAGH: On this particular project, the information that I have is that it has been referred to the BIFR. I would like to check up whether it was commissioned or not.

SHRI DIPANKAR MUKHERJEE: Mr. Chairman, Sir, I want your protection. I am not talking about the question of referring it to the BIFR. I am talking about a policy decision. To cut down the cost and time over-runs are you going to abandon a project, if there is a pre-commissioning delay?

SHRI YOGINDER K. ALAGH: Sir, we have taken only one policy decision and that is if a project has crossed 60 per cent of its gestation period and if less than five per cent of the money has been spent on it, then that project should be shelved or it should be considered for privatisation. But, there is no decision whatsoever that a project, which has been completed, should be shelved. If in an individual case, there is a problem, we will have to look into it.

SHRI DIPANKAR MUKHERJEE: Kindly look into this case.

SHRI YOGINDER K. ALAGH: I will look into that case. I will look into the Haldia-Barauni Refinery.

SHRI DIPANKAR MUKHERJEE: No, it is not refinery. It is fertiliser.

The Question was actually asked in the floor of the House by Shrimati Veena Verma.

Improvements in the Nuclear Reactors Suggested by IAEA

*304. SMT. VEENA VERMA:
SHRI SUSHIL KUMAR
SAMBHAJIRAO SHINDE:

Will the PRIME MINISTER be pleased to state:

(a) whether the International Atomic Energy Agency (IAEA) has declared that all the nine power reactors of India fall among the 50 least reliable reactors in the world;

(b) if so, what specific improvements were suggested by the IAEA, to make them reliable; and

(c) what is Government's reaction thereto?

THE MINISTER OF STATE OF THE MINISTRY OF PLANNING AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI YOGINDER K. ALAGH): (a) No, Sir.

(b) and (c) Do not arise. IAEA does not give any suggestions to improve the reliability of power reactors.

श्रीमती वीणा वर्मा: सर, मंत्री जी के जवाब में अंतर्राष्ट्रीय स्तर पर विश्वसनीयता के आधार पर जवाब "नहीं" में है, लेकिन मैं मंत्री जी का ध्यान दिलाना चाहती हूं कि डा॰ गोपालकृष्णन, जो अभी लास्ट चेयरमेन थे और रिटायर हुए, उन्होंने अपने लास्ट स्टेटमेंट में, अपने पीरिएड में तो वह नहीं कह पाए, लेकिन उन्होंने लास्ट डे रिएक्टर के बारे में, पावर प्लांट और रिएक्टर के बारे में बहुत सी डेफिसिएन्सी, 130 डेफिसिएन्सी के बारे में ध्यान दिलाया था, खासतौर से सेफ्टी डेफिसिएंसी के बारे में।

महोदय, हमारा जो इंडियन एटॉमिक एनर्जी कमीशन है, उसमें ही सारी रेग्युलेटरी अथॉरिटी है। मैं मंत्री महोदय से यह पूछना चाहती हूं कि क्या सरकार इस एक्सॅटामिक एनर्जी रेग्युलेटरी बोर्ड को इंडिपेंडेंट बनाने पर विचार करेगी जिससे सेफ्टी रेग्युलेशन्स की विश्वसनीयता की जो कमी है, उसको दूर किया जा सके और उनको अच्छी तरह से रेग्युलेट किया जा सके?

SHRI YOGINDER K. ALAGH: Mr.

Chairman, Sir, this news item pertaining to the International Atomic Energy Agency really appeared based on an article written by one Mr. Eric Arnet who is working in the International Peace Research Institute, Stockholm. That article appeared in the bulletin "Atomic Scientist" in November/December, 1996. It said that our reactors are not working well and they are unreliable. In fact, this was based on a wrong information. I will come to the suggestions of Prof. Gopalakrishnan a little later. The hon. Member has referred to this piece of information. It is true that the plant load factor of power reactors was 40 per cent. But in 1993-94 it improved to 67 per cent. In 1995, it was at 60 per cent which is very close to the design level. I would like to inform the hon. Member, Shrimati Veenaji, on the safety issue. इसमें कितना ज्यादा लोड बढ़ा। I have a letter. We have checked it up from the International Atomic Energy Agency. इस एजेंसी का आपने रेफरेंस दिया है।

This has been written by the Deputy Director General and the Head of the Department of Nuclear Safety to the Editor of the "Atomic Scientist" journal. With the permission of the Chair, I would like to read it out. "Dear Mr. Moth, I note that in the November/ December, 1996 issue of the "Atomic Scientist" journal, an article written by Mr. Eric Arnet on "India's nuclear brown out" a reference is made to the work of the International Atomic Energy Agency. I would like to know that the International Atomic Energy is not monitoring the operation of reactors. Rather the IAEA collects information which is regularly published. This publication gives information such as availability factors, load factors, description of outage tanks. it doesn't include any judgement on reliability." The IAEA itself is saying—I will be very happy to pass on this letter to the hon. Member—that the nuclear safety business is very wrong.

Now, as far as the 130 suggestions of Dr. Gopalakrishnan are concerned—we have discussed them a little earlier—I want to give an assurance to the hon. Member that all his suggestions have been very carefully examined. The short-run ones which we can implement right now are all being implemented. There are some suggestions that have been made. I think what Dr. Gopalakrishnan did was he put together things which had been discussed a number of times. He did a good piece of work. There are suggetions which need two or three years to implement. For example, the collant channels of the nuclear power reactors should be changed. Now, this is the reason why our Rajasthan Atomic Power Plant has been shut down for repairs. It is some 20 year old. We are implementing these recommendations. So, we will definitely implement these recommendations.

The Atomic Energy Regulatory Board is a Board which has a lot of powers, it can shut down a power plant. In fact, it has in the past shut down power plants. Of course, it does report to the Atomic Energy Commission. But the Atomic Energy Commission also has experts on it nominated by the Government. So, the Atomic Energy Regulatory Board virtually acts. It has what is called functional autonomy. We have every intention of respecting that. We have made a very senior scientist, Dr. Rama Rao, the former Secretary of the Department of Science and Technology, the Chairperson of the Board.

As I have said last time, there were a few statements which Dr. Gopalakrishnan made on CNN, the night vent. Our Ambassador was arguing out the case for the CTBT. He said that we are violating our treaty obligations. Those are the things to which I have objected. But whatever scienctifc work he has done, we take it very seriously and we are implementing it.

श्रीमती वीणा वर्मा: सर, इंडिया में जो भी न्यूक्लिअर रिएक्टर एंड न्यूक्लिअर पावर प्लांट हैं उनमें

समय-समय पर लीकेज हुई है, यह तो आप स्वीकारेंगे--अभी यू०पी० में हुई है, बार्क में हुई है। तो मैं जानना चाहती हूं कि अब कितने लीकेज हुए हैं और उससे क्या डेमेज हुआ है? और बहुत से हेबिटेट, जहां आबादी पास में बस रही है, वह नार्म्स फॉलो नहीं कर रहे है। तो वे रूल्स क्यों नहीं फॉलो हो रहे हैं? आप कोई ऐसे रूल्स मेंटेन करते हैं, क्या सरकार मेंटेन करती है इस मामले में कि रिएक्टर से कितनी दूर हेबिटेट हो? इस बारे में इंटरनेशनल रूल्स-रेगुलेशन्स सरकार क्यों नहीं लागू करती? इस बारे में सरकार का क्या रिएक्शन है ...(व्यवधान)...

श्री सुशील कुमार संभाजीराव शिन्दे: ताकि दूसरा चेरनोबिल न हो जाए।

श्रीमती वीणा वर्मा: हां, ताकि कहीं दूसरा चेरनोबिल न हो जाए?

SHRI YOGINDER K. ALAGH: Sir, I am grateful to the hon. Members, Mr. Shinde and Smt. Veena Vermaji, for raising this question. We strictly follow the international regulations. There is an area around the plant in which no habitation is allowed. There is a wider area in which there are srict regulations of the kind of activity that is allowed and there is a zone in which tracking is done by safety procedures. Each nuclear plant has its own laboratory. All effluents from it are tested. Thousands of tests are done inlcuding tests of air, of water, of leaves and so on. and, to the best of my knowledge, there has been no leakage of the kind which has created any problems for habitation. There have been two fire accidents which is a separate question I had referred to. There also, they had been controlled. I would like to bring it to the attention of the hon. Member that while some people give this kind of highly irresponsible statements—for example, on the IAEA, which I was able to read out to you—the International Atomic Energy Authority itself has written to this man that he is giving wrong information. Our reactors have worked for more than 100 years, more than 100 reactor years and there have been no radiation-caused injuries.

SHRI SURINDER KUMAR SINGLA: Then, why did they publish the article in that paper?

MR. CHAIRMAN: It is not your turn.

SHRI YOGINDER K. ALAGH: It is a very good question. The International Atomic Energy Authority itself has written to the journal saying that this is a worng thing to do. We msut appreciate that.

SHRI SUSHILKUMAR SAMBHAJIRAO SHINDE: Sir, until recently, nuclear energy was the only source holding promise to meet the growing needs of the country. But lately, it appears that the Government has shifted its priority, again falling back on coal and thermal power fuel, instead of creating and reviving the public confidence in nuclear resources for power. Now, may I know what was the percentage of power supply contributed by nuclar energy in the beginning of the Seventh and the Eighth Plans and, at present, what is the target of nuclear power in terms of percentage of energy production to be contributed by nuclear resources by the end of the Century? Sir, the time available is very short. The life of a reactor is only 20 years. Tarapore—I is going to complete 20 years. As for Tarapore-II, a lot of complications are coming up. With this reference, I would like to put this question, through you, Sir, to the hon. Minister. Sir, he can reply to me in writing because the time is getting out.

SHRI V. NARAYANASAMY : He will communicate to you over the telephone.

MR. CHAIRMAN : Mr. Minister, you have one minute to reply.

SHRI YOGINDER K. ALAGH : Sir, I want to assure the hon. Member, Shinde Saheb, that we do give priority to nuclear power. Two plants are proposed in the Ninth Five-Year Plan. We are planning. We are requesting the Planning Commission to include it and also meet the more important point that he has made that in those areas where hydel

options are not available and are located far away from coal sources,nuclear power is a real option. Now that our plant load factors are working we hope to give it a high priority in the Ninth Five Year Plan. As the hon. Member has suggested, if there are individual questions, any hon. Member may please write to me and I would be very happy to provide full clarifications. *(Interruptions)*

SHRI SATCHIDANANDA : Sir, this is a very important issue. Half-an-Hour Discussion may be permitted on this question.

MR. CHAIRMAN : Question Hour is over.

WRITTEN ANSWERS TO STARRED QUESTIONS

Availability of Petroleum and Natural Gas in Rajasthan

*301. SHRI RAMDAS AGARWAL : Will the PRIME MINISTER be pleased to state :

(a) whether Government are aware of the availability of petroleum and natural gas in Rajasthan;

(b) if so, the details thereof;

(c) the names of area where petroleum and natural gas have been found and the names of agencies engaged in the excavation works;

(d) the amount spent and the results achieved so far;

(e) the future plans in this regard and the budgetary allocations made during 1996-97, as compared ot 1995-96; and

(f) whether Government are in favour of setting up of an oil based public sector in the State?

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI T.R. BALLU)
(a) Yes, Sir.

(b) and (c) Both ONGC and OIL are engaged in exploration and produption of Hydrocarbons in Rajasthan. ONGC has established gas reserves at Kharatar, Manhera Tibba, Ghotaru, Bankia and Bhakri Tibba in Jaisalmer Basin.

OIL has established reserves of gas at Tanot, Dandewala, Baggi Tibba, Jalalwala, Ramgarh and Gamnewala in Jaisalmer basin and of heavy oil at Baghewala in Bikaner — Nagaur Basin in Rajasthan.

(d) As on 1.4.1996 ONGC and OIL have spent a total amount of about Rs. 542 crores on exploration and development work in Rajasthan and as a result thereof reserves of about 11.17 BCM of gas and 14.60 MMTof heavy oil have been estabished. During first half of 1996-97 ONGC has already started producing natural gas at a rate of 0.035 MMSCMD. Oil is presently producing at a rate of 0.3 MMSCMD.

(e) During the period 1996-97 to 2000-20001 ONGC has planned to carry out seismic surveys of 2061 GLK and drill 7 exploratory wells by carrying out a total meterage of 18200 m.

The budget allocation (plan) for Rajasthan in respect of ONGC during 1996-97 vis-a-vis actuals for 1995-96 are as under :—

Rs. in crores

1995-96	Actuals	17,06
1996-97	Revised estimates	26.37

In addition to carrying about 12400 m. of drilling and development of gas fields during current year OIL has planned to carry out 20000 m. of exploratory drilling and 20000 m. of development drilling in Rajasthan in the 9th plan. Oil has also planned for increase in produciton potential of gas field to about 1 MMSCMD by end of 9th plan.